

IN THE CLAIMS:

Kindly replace claims 1, 3-5, 9, and 22 with the following new claims. An Appendix showing all changes to the claims is attached to this amendment as required by 37 CFR § 1.121(c).

B¹⁴
1 1. (Twice amended) A composition for the inhibition of tumorigenesis
2 comprising a pharmaceutical carrier and an antisense nucleic acid comprising at least 15
3 nucleotides hybridizable in a cell to at least a portion of an RNA transcript of a Nr-CAM gene
4 of SEQ ID NO: 1 in an amount effective to inhibit tumorigenesis by inhibiting
5 hyperproliferation of a human tumor cell having high Nr-CAM expression.

B¹⁷
1 3. (Twice amended) A method of inhibiting proliferation of a human cell
2 expressing Nr-CAM in a subject comprising administering to the subject an effective amount
3 of a Nr-CAM antisense nucleic acid comprising at least 15 nucleotides that inhibits Nr-CAM
4 expression, wherein the Nr-CAM antisense nucleic acid is hybridizable in the cell to at least a
5 portion of a RNA transcript of the Nr-CAM gene of SEQ. ID. NO.: 1.

B¹⁸
1 4. (Amended) The method according to claim 3 in which the human cell
2 expressing Nr-CAM is involved with a malignancy.

1 5. (Amended) The method according to claim 4 in which the malignancy
2 is selected from the group consisting of brain cancer, leukemia, and B cell lymphoma.

B¹⁹
1 9. (Amended) The method according to claim 3 in which the human cell
2 expressing Nr-CAM is involved with a disease or disorder selected from the group consisting
3 of premalignant conditions, benign tumors, hyperproliferative disorders, and benign
4 dysproliferative disorders.

B²⁰
1 22. (Amended) The composition of claim 1, wherein the composition is
2 formulated as a liquid.

Please add the following claims:

B²¹
1 23. (New) The method of claim 3, wherein the Nr-CAM antisense nucleic
2 acid is administered locally.

1 24. (New) The method of claim 23, wherein the local administration is by
2 direct injection.

- 1 25. (New)The method of claim 4, wherein the Nr-CAM antisense nucleic
2 acid is administered locally by direct injection at the site or former site of a tumor.
- 1 26. (New)The method of claim 25, wherein the administration is
2 intratumoral.
- 1 27. (New)The method of claim 3, wherein the human cell expressing Nr-
2 CAM is a tumor cell of the central nervous system and the administration is intraventricular or
3 intrathecal.
- 1 28. (New) The composition of claim 23, wherein the tumor cell is a human
2 glioblastoma cell.
- 1 29. (New) The composition of claim 23, wherein the isolated nucleic acid
2 comprises at least 15 nucleotides corresponding to a portion of SEQ ID NO: 1 that is within
3 nucleotides 119 to 2746.
- 1 30. (New) The composition of claim 23, wherein the isolated nucleic acid
2 comprises at least 15 nucleotides corresponding to a contiguous portion of SEQ ID NO:1 that
3 is within nucleotides 119 to 1434.
- 1 31. (New) An isolated nucleic acid comprising at least 15 nucleotides, the
2 isolated nucleic acid hybridizable, under highly stringent conditions comprising hybridization
3 in an aqueous solution containing 6X SSC at 65° C, to at least a portion of a messenger RNA
4 having SEQ ID NO: 1 and encoding human Nr-CAM, wherein the oligonucleotide inhibits the
5 expression of Nr-CAM in a tumor cell.
- 1 32. (New) A method for inhibiting the migratory activity of a tumor cell
2 expressing Nr-CAM in a subject comprising administering to the subject an effective amount
3 of a Nr-CAM antisense nucleic acid comprising at least 15 nucleotides that inhibits Nr-CAM
4 expression, wherein the Nr-CAM antisense nucleic acid is hybridizable in the cell to at least a
5 portion of a RNA transcript of the Nr-CAM gene of SEQ. ID. NO.: 1.
- 1 33. (New) A method for inhibiting the ability of a tumor cell expressing Nr-
2 CAM to invade the extracellular matrix in a subject comprising administering to the subject an
3 effective amount of a Nr-CAM antisense nucleic acid comprising at least 15 nucleotides that
4 inhibits Nr-CAM expression, wherein the Nr-CAM antisense nucleic acid is hybridizable in the
5 cell to at least a portion of a RNA transcript of the Nr-CAM gene of SEQ. ID. NO.: 1.
- B 21
-